BE NICE OR PAY THE PRICE: ADDED VALUE OF INTERPERSONAL SKILLS TRAINING ON ANALOGUE CONSULTATION OUTCOMES

by

Lindsey Long

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Director: Scott Methe, Ph.D.

DEPARTMENT OF: Psychology

School psychologists are trained in various models of problem solving and interviewing, however the interpersonal skills that play an integral role in consultation are not uniformly taught to trainees. The primary objective of this study was to examine the added value of an interpersonal skills training program on key outcomes of analogue consultation. Nine school psychology graduate students served as consultant participants, and participated in either an interpersonal skills training or control training. The online interpersonal skills training program was based on characteristics of effective consultants and strategies for building healthy relationships. All consultants completed a problem solving training based on stages of behavioral consultation. Thirty undergraduate students served as consultee participants, and worked with consultants in a problem solving activity about difficulties faced by college students.

The first dependent variable, treatment acceptability, measured consultee views of both a treatment proposed by consultants and of the consultants themselves. The second dependent variable, perceived consultant effectiveness, measured consultee views of the consultant's interpersonal and problem solving skills. The third dependent variable, follow through,

measured how many steps of a follow-up activity consultees completed. The fourth dependent variable, treatment implementation, measured if consultees did or did not implement an intervention suggested by the consultant.

A higher proportion of consultees in the experimental group reported implementing the intervention suggested by the consultant than those in the control group. Regression analyses found that experience of the consultee accounted for the most significant proportion of variance in the perceived consultant effectiveness variable. Higher levels of consultee experience were associated with lower ratings of perceived consultant effectiveness. A combination of consultee gender, consultee and consultant preexisting social skills, and consultee and consultant experience covariates impacted whether or not consultees implemented interventions suggested by consultants. These results indicate that a variety of factors influence key consultation outcomes. Study findings can be used to inform future research that examines how school psychology programs approach interpersonal skills training and provide information toward the creation of an explicit interpersonal skills training program in order to enhance the effectiveness of school-based consultation.

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APPROVED BY:

DIRECTOR OF THESIS: _____

Scott Methe, Ph.D.

COMMITTEE MEMBER: _____

Michael B. Brown, Ph.D.

COMMITTEE MEMBER: _____

T. Chris Riley-Tillman, Ph.D.

CHAIR OF THE DEPARTMENT OF PSYCHOLOGY: _____

Kathleen Row, Ph.D.

DEAN OF THE GRADUATE SCHOOL: _____

Paul J. Gemperline, Ph.D.

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CHAPTER I: INTRODUCTION

Consultation is a fundamental function of the role of school psychologists. School-based consultation allows psychologists to provide problem solving focused service delivery through a dyadic relationship with an individual in need of assistance. The importance of problem solving and the positive outcomes resulting from consultation are well documented (Erchul & Sheridan, 2008; Sheridan, Welch, & Orme, 1996). Much of the research in the field of consulation has focused on interpersonal and relational communication (Erchul, 1993; Erchul & Chewning, 1990) and concepts such as treatment integrity (Gresham, 1989; Wilkinson, 2006), treatment acceptance (Kazdin, 1980; Wolf, 1978), and consultation effectiveness (MacLeod, Jones, Somers, and Havey, 2001; Medway & Updyke, 1985). Although school psychologists are trained in various models of problem solving and interviewing, the interpersonal skills that play an integral role in consultation are not uniformly taught to trainees.

The Nature of Consultation

Fundamentally, consultation is an indirect process where a knowledgeable consultant works with a consultee who is in need of help to solve a problem or problems with a client. Dougherty (2009) defined school and human services consultation as "a process in which a human service professional assists a consultee with a work-related (or care-taking related) problem with a client system, with the goal of helping both the consultee and the client system in some specified way" (p. 11). Erchul and Martens (2002) define consultation in a school and education framework as "a process for providing psychological and educational services in

which a specialist (consultant) works cooperatively with a staff member (consultee) to improve the learning and adjustment of a student (client) or group of students" (pp. 13 – 14).

Interpersonal Skills Important in Consultation

Interpersonal skills make up a large and important part of consultation. Each interaction between a consultant and consultee shapes the relationship between the two parties, and affects the problem solving process and outcomes. Interpersonal skills encompass a vast spectrum of behaviors, both verbal and non-verbal, but can broadly be defined as "goal-directed behaviours used in face-to-face interactions in order to bring about a desired state of affairs" (Hayes, 2002, p.3). In applying this definition to consultation, interpersonal skills can be defined as actions taken by a person in the presence of a consultee that help to indirectly alter client behavior.

In a school-based framework of support, interpersonal skills are often discussed as part of other processes such as relational communication, the microskills hierarchy, and verbal interactions, but not examined specifically. Relational communication research largely ignores the content of messages between individuals, and instead focuses on the process and control of communication, and the effects these factors have on consultation (Erchul, 1987; Erchul & Chewning, 1990; Erchul, Covington, Hughes, & Meyers, 1995). The microskills hierarchy developed by Ivey and Ivey (1999) provides steps for interviewers to effectively communicate with consultees during interactions. Attending behaviors and interpersonal skills (such as eye contact, body language, and listening) lie at the base of this hierarchy, and serve as a foundation for higher order consultative processes. Verbal interaction outcomes have also been examined through research that codes communication between dyads for discussion content, the process and function of statements, the sources of statements, and conversational control (Martens, Erchul, & Witt, 1992; Martens, Lewandowski, & Houk, 1989).

Research indicates that there are several common interpersonal skills utilized by effective human service professionals in educational settings (Dougherty, 2009; Knoff, Hines, & Kromrey, 1995; Kurpius & Rozecki, 1993). One general skill is exhibiting effective communication strategies such as straightforward language, effective questioning and varied response types. Another skill is including the values and opinions of the consultee in the helping process in order to foster a supportive environment. Personal characteristics including sensitivity, trustworthiness, and empathy are also highlighted as characteristics of effective consultants.

Interpersonal Skills and the Process of Consultation

Although school consultation can be expressed in a variety of ways, there are three major consultation models (behavioral, mental health, and organizational) that each have different underlying assumptions and methods. Several general elements of these helping models, however, are agreed upon. The first of these aspects is that the goal of consultation is to solve a problem (Dougherty, 2009). The type and intensity of educationally-relevant problems encountered in schools is quite broad. This problem-solving goal, however, does not necessarily mean that something is wrong, but that something needs to be improved or examined. For example, a school searching for a new prevention program may seek help in choosing a new program even though the one they currently have is working adequately. Consultants help consultees to define and examine their problems, and assist in providing and evaluating solutions.

The triadic nature of consultation is a second widely accepted assumption (Buysse & Wesley, 2005). The three parties involved in school consultation are the consultant, consultee, and client. The consultant is often a human service professional (for example, a school

psychologist, counselor, or social worker) and the consultee is often in a professional role in the school (such as an administrator or teacher). The client can be and individual (student), group of individuals, or an entire organization (for instance, a school; Dougherty, 2009). The consultant works with a consultee, who in turn helps a client or clients. This method is "indirect" in that the consultee serves as an intermediate party who transfers knowledge learned from the consultant into his or her assistance to a client. Although the client is a beneficiary of help, an interpersonal perspective of consultation views the relationship and interactions between the consultant and consultee dyad as shaping the problem-solving process. Erchul et al. (1992) found positive consultee ratings of consultant effectiveness and consultation outcomes when dyads were in agreement regarding consultation issues and decisions.

Third, consultees may accept or reject any suggestions made by a consultant (Zins, Kratochwill, & Elliot, 1993). The participation of consultees is voluntary, and they have the freedom to decline or consent to solutions from the consultant. Fourth, the interpersonal relationship and messages between the consultant and consultee are confidential (Conoley & Conoley, 1992). Information put forth during consultation is to remain strictly between relevant persons. Confidentiality is maintained unless either party believes that information divulged during consultation will prevent harm to someone. Consultants need to possess interpersonal skills that allow them to comfortably discuss these instances when information gained during consultation could be put to use (such as in a court of law) with consultees (Brown, Pryzwansky, & Schulte, 2001). This will encourage open communication about the differences between confidential and non-confidential disclosures between all parties involved in the consultation process.

Finally, consultation serves the dual purposes of solving the current professional problem of consultees and enabling them to solve their own problems in the future (Erchul & Martens, 2002). The primary objective of helping may first be seen as helping a client with an existing issue. Through the helping process, however, the consultee additionally develops the insights, skills, and knowledge necessary to effectively handle similar future issues without the aid of a consultant.

The Contexts of Consultation

School consultation. School psychologist practitioners commonly employ mental health consultation and behavioral consultation (Fagan & Wise, 2000). Mental health consultation developed out of Gerald Caplan's realization that an indirect method of mental health service delivery would largely benefit the individual diagnoses and treatment of mental health clients (G. Caplan, R. B. Caplan, & Erchul, 1994). Caplan discovered that by working with consultees and providing them with new perspectives and knowledge, more clients are reached than is possible through direct services to clients.

Mental health consultation is built upon the assumption that the consultative relationship is cooperative and non-hierarchical (Brown, Pryzwansky, & Schulte, 1991). Both the consultant and consultee possess expertise in their perspective areas and the consultant is not an authority figure in the relationship. This helps to ensure that the consultee has freedom in considering consultant suggestions, and that consultative services will be successful. Mental health consultation takes one of four forms depending on the focus of consultation (a client or administration), and on the primary goal of consultation (providing knowledge or improving problem-solving capacity).

John Bergan's behavioral consultation model (1977) is frequently used by school psychologists to influence teachers to utilize an intervention (Jones et al., 1997). Bergan expanded upon the existing notion of training consultees in methods that increase or decrease consequences that follow behaviors by integrating strategic communication skills, collaboration, detailed intervention plans, and outcome assessment into consultation (Martens & DiGennaro, 2008). Behavioral consultation focuses on problem identification, problem analysis, intervention, and evaluation of intervention programs for students with learning and adjustment problems. Analyzing the problems of students assumes that behavior can be influenced by environmental contingencies (Kratochwill & Bergan, 1978). Behavioral consultation facilitates change in the client, client system, and consultee through the use of social learning theory and interventions to reduce the difference between the current and desired frequencies of a behavior (Dougherty, 2009).

Importance of school psychologists' training in interpersonal skills. Gutkin and Curtis (1982) referred to consultation as an interpersonal exchange and highlighted how "the consultant's success is going to hinge largely on his or her communication and relationship skills" (p. 822). Erchul (2003) also commented that at its core consultation is comprised of a series of face-to-face interactions that contribute to an interpersonal relationship between a consultant and consultee. Knoff, Sullivan, and Liu's (1995) factor analysis found that "interpersonal skills are always considered important to the effectiveness of a consultant (or school psychology itself)," regardless of teacher demographics (p. 54).

The National Association of School Psychologists (2000) indicates in their consultation and collaboration domain of professional practice that school psychologists must have both knowledge of consultation models and methods, and collaborate effectively with others. School

psychology training programs must additionally assess and be accountable for training students in "effective interpersonal relations" (p. 20). In their guidelines to developing a framework for school psychology curricula (which was approved by the International School Psychology Association), Cunningham and Oakland (1998) held interpersonal skills training in high regard. They found leadership and collaboration skills to be especially significant in the job of school psychologists, and that the psychological services they provide in their role on teams and during conflict mediation requires adequate training in social interaction skills.

Statement of the Problem

Consultation is a significant function of the role psychologists specializing in a variety of fields. Psychotherapists, counselors, and school psychologists all engage in consultation in order to provide a problem solving service and impart to others the knowledge and skills needed to solve future problems. A broad research base has examined integral parts of consultation such as problem solving steps, interview components, treatment integrity, treatment acceptability, and effectiveness. The interpersonal skills that play a vital role in the relationship between a consultant and consultee are also emphasized. However, it is unclear how psychology trainees are taught to develop these crucial interpersonal skills, and no uniform program of interpersonal skills currently exists in training programs.

Research Objective, Questions, and Hypotheses

While attributes of effective helpers and the importance of interpersonal skills on the consultative process are documented in the literature, less is known about the value added to the problem-solving relationship by an interpersonal skills training program. This suggests that practicing school psychologists may not be optimally prepared for problem solving with consultees, including teachers and other school professionals. The primary objective of this

research study was to examine the added value of an interpersonal skills training program on several key outcomes of consultation: treatment acceptability, perceived consultant effectiveness, follow through, and treatment integrity. The results of this study will be useful in providing information towards the creation of an explicit and uniform method to teach interpersonal skills to school psychology graduate students in order to enhance the effectiveness of the school-based consultation processes.

The first research question was whether an interpersonal skills training program would have an effect on consultee treatment acceptability ratings. It was hypothesized that consultees who met with consultants who participated in an interpersonal skills training program would give significantly higher ratings of treatment acceptability than consultees who worked with consultants who did not participate in an interpersonal skills training program. The second research question was whether an interpersonal skills training program would have an effect on ratings of perceived consultant effectiveness. It was hypothesized that consultants who participated in an interpersonal skills training program would receive significantly higher ratings of perceived consultant effectiveness than consultants who did not participate in an interpersonal skills training program. The third research question was whether an interpersonal skills training program would have an effect on a follow through measure of consultation. It was hypothesized that consultees who met with consultants who participated in an interpersonal skills training program would complete significantly more steps of a follow through measure than consultees who worked with consultants who did not participate in an interpersonal skills training program. The fourth research question was whether an interpersonal skills training program would have an effect on treatment implementation. It was hypothesized that consultees who met with consultants who participated in an interpersonal skills training program would be more likely to

implement the treatment than consultees who worked with consultants who did not participate in an interpersonal skills training program

CHAPTER II: REVIEW OF THE LITERATURE

The Nature of Consultation

Consultation is a function common to schools, yet uncertainty often surrounds the idea and definition of consultation. In his review of school consultation research, Medway (1979) provided the following definition of consultation: "consultation entails collaborative problem-solving between a mental health specialist (the consultant) and one or more persons (the consultees) who are responsible for providing some form of psychological assistance to another (the client)" (p. 276). Erchul and Martens (2002) clearly define the roles of the three parties involved in consultation by naming specialists as the consultants, staff members as the consultees, and a student or group of students as the clients. School consultation can be conceptualized as an efficient, preventative method of problem-solving. Consultants discuss cases with consultees anticipating that these consultees will use insights and skills learned during consultation regarding a single client to help future clients (Conoley & Conoley, 1992). In this way, consultation is efficient because it allows school psychologists to indirectly affect large numbers of students.

While several different models of consultation are used in schools (such as mental health and organizational), the behavioral model of consultation is the model most commonly taught in the preservice consultation course work of school psychologists (Anton-LaHart & Rosenfield, 2004). Behavioral consultation was also found by Costenbader, Swartz, & Petrix (1992) to be the model of consultation most widely used in schools. These researchers found that 38% of National Association of School Psychologists (NASP) member survey responses indicated that they utilized a behavioral consultation model in practice.

The behavioral model of consultation includes four major stages of problem solving: problem identification, problem analysis, plan implementation, and problem evaluation (Kratochwill & Bergan, 1990). During the problem identification stage, the consultant and consultee engage in a problem identification interview (PII) aimed at specifying and describing the problem to be solved (Kratochwill & Bergan, 1990). This stage also includes deciding how to measure current client performance and client goals, and determining the existing discrepancy between the two (Dougherty, 2009). The second stage of behavioral consultation is problem analysis, and is conducted through a problem analysis interview (PAI). The purpose of this stage is to identify variables that may be manipulated to help the client progress toward identified goals and to make a plan to accomplish these goals (Kratochwill & Bergan, 1990). During the third stage, plan implementation, the plan determined by the consultant and consultee in the previous stage is prepared for and put into action (Dougherty, 2009). Plan implementation requires further measurement of client performance and that the consultant communicate with and assist the consultee in order to ensure that the plan is being implemented as intended (Kratochwill & Bergan, 1990). The fourth and final stage of behavioral consultation, treatment evaluation, is accomplished through a treatment evaluation interview (TEI). The purposes of treatment evaluation are to determine whether the client has achieved goals through evaluating measured data; to determine the effectiveness of the plan; and to plan for what happens next (termination of the plan, revision of the plan, or creation of a new plan) (Kratochwill & Bergan, 1990).

Interpersonal Skills Important in Consultation

Interpersonal skills play an important role in consultation, as they influence the relationship and communication between consultants and consultees. The importance of interpersonal skills was highlighted by Zins and Erchul (2002), who stated that:

> good interpersonal and communication skills are critical because consultation relies heavily on the interpersonal influence process to accomplish its goals. Consultants need, for instance, to be active listeners and to utilize effective questioning techniques to extract necessary information from consultees and to develop clear conceptualizations of problems. Further, the establishment of warm, caring, and understanding relationships is as important in consultation as it is in counseling. (p. 630)

Each interaction between a consultant and a consultee, therefore, impacts not only the relationship between the two parties, but also the outcomes of consultation.

Interpersonal skills utilized by effective consultants and specific attributes of these consultants are discussed in the literature. Knoff, Hines, and Kromrey (1995) analyzed research on characteristics of effective school psychology consultants and found that they (a) exhibit communication skills, (b) use straightforward language, (c) are open and ask teachers for their opinion, (d) define their contract, expectations, and definition of success with the consultee, (e) are supportive of the consultee, and (f) join problem solving with sensitivity, among other characteristics.

Dougherty (2009) also pointed out the importance of social and interpersonal influence on psychological acceptance. He found that several interpersonal skills displayed by consultants that impact consultation effectiveness include identifying with the values of the consultee and

organization they work with; creating trustworthiness by exhibiting understanding, confidentiality, and credibility; and using effective questioning.

Additional strategies for improving interpersonal communication between consultants and consultees who work with children were considered by Kurpius and Rozecki (1993). These methods include: (a) demonstrating the attending behaviors of genuineness, empathy, and positive regard; (b) using verbal behaviors such as listening responses (which clarify, reflect, and summarize), action responses (such as probes, competency responses, confrontation, and interpretation), sharing responses (including self-disclosure and immediacy), and teaching responses (instructing, giving information, and modeling); and (c) showing nonverbal behaviors like kinesics, paralinguistics, autonomic responses, and proxemics.

Ivey and Ivey (1999) provide an evidence-based microskills hierarchy as a framework for individuals who wish to conduct positive and effective interviews. Microskills can be defined as single units of communication that aid interactions with consultees during interviews (which are an integral part of behavioral consultation in school settings). The microskills hierarchy organizes these microskills in a systematic and integrated fashion in order to facilitate successful interviews.

Attending (or listening) behaviors lie at the foundation of the microskills hierarchy, as they provide a basis for communication. The primary function of attending behaviors is to encourage consultees to engage in discussions with consultants, while secondary functions of attending behaviors include the communication of consultant interest, establishing rapport, and understanding consultee patterns of attending (Ivey & Ivey, 1999). Critical attending skills to master in order to conduct an effective interview include culturally and individually appropriate eye contact, vocal qualities, verbal tracking, and body language.

The basic listening sequence represents a significant portion of the microskills hierarchy, and falls directly above attending behaviors. The basic listening sequence serves to help the consultee share what they know about and feel towards the client problem. Open and closed questions; observation skills; encouraging, paraphrasing, and summarization; and reflection of feeling are the identified by Ivey and Ivey (1999) as aspects of the basic listening sequence that should be utilized by consultants in effective interviews.

Gottman and DeClaire (2001) highlight the importance of interpersonal skills in their discussion of improving relationships, such as those between consultants and consultees. The researchers identified that individuals should analyze their own bids and bid responses as a first step toward building awareness of emotional communication. A bid can be defined as a "fundamental unit of emotional communication" (Gottman & DeClaire, 2001, p. 4) while a bid response can be described as an answer to another's communication attempt. Research indicates that bid responses falls into three major categories of turning toward, turning against, and turning away (Gottman & Driver, 2005). Turning toward bid responses are appropriate and positive, turning against bid responses are argumentative and negative, and turning away bid responses involve ignoring or preoccupation. By investigating their own positive and negative reactions to others, consultants can adapt their behavior and improve interpersonal communication with consultees.

A Focus on School Consultation and School Psychologists

Treatment acceptability. Numerous possible intervention plans are typically discussed by consultants and consultees during the consultation process. However, consultees may have distinct perceptions and feelings towards proposed treatment options. Treatment acceptability refers to a consumer's evaluation of a treatment, specifically "whether treatment is appropriate for the problem, whether treatment is fair, reasonable, and intrusive, and whether treatment meets with conventional

notions about what treatment should be" (Kazdin, 1980, p. 259). Treatment acceptability is an important concept to the field of consultation in that the success of treatments may be influenced by how consultees judge these treatments. This point is illustrated by Wolf (1978), who explained the gravity of consumer feedback by stating:

> that if the participants don't like the treatment then they may avoid it, or run away, or complain loudly. And thus, society will be less likely to use our technology, no matter how potentially effective and efficient it might be. (p. 206).

Many researchers have proposed conceptual models that incorporate treatment acceptability with treatment initiation, adherence, and effectiveness. Treatment acceptability, treatment use, treatment integrity, and treatment effectiveness are the four core elements of an early model of acceptability in school settings (Witt & Elliott, 1985). The researchers of this model hypothesized that these factors work in a sequential, reciprocal, and interdependent manner. Later, this model was expanded upon by Reimers, Wacker, and Koeppl (1987) who incorporated the five factors of treatment understanding, treatment acceptability, treatment compliance, treatment effectiveness, and environmental disruption in their own model. The major additions of this treatment acceptability model upon the Witt and Elliott (1985) model are the emphasis on (a) the consultee's understanding of treatment, which may be improved by treatment education or explanation from the consultant, and (b) disruption to the family or classroom environment, which may be improved by treatment modification. In their review of the previous treatment acceptability conceptual models and others, Eckert and Hintze (2000) identified the following as common key elements: treatment knowledge, treatment effort, treatment complexity, treatment intrusiveness, treatment severity, treatment use, treatment side effects, and treatment effectiveness.

Treatment acceptability levels can be influenced by several variables including the type of treatment, feasibility of the treatment, and the severity of the problem central to consultation. Type of treatment refers to whether a treatment is positive in nature (e.g. the presentation of praise or

tokens) or reductive in nature (e.g. the removal of a desired stimulus or time out). Research indicates that positive treatments receive higher acceptability ratings than reductive treatments (Reimers, Wacker, & Koeppl, 1987). Feasibility of treatment takes into account whether the time, resources, and funds required to implement the treatment are possible. In a factor analysis of an instrument to measure teacher perceptions of interventions, Chafouleas, Briesch, Riley-Tillman, and McCoach (2009) stated that feasibility "is certainly a legitimate practical concern with the potential to restrict intervention usage" (p. 9). Severity of the problem behavior of the client is an additional factor influencing treatment acceptability. Overall, research shows that treatment acceptability ratings are higher for interventions for severe behavior problems versus mild behavior problems (Eckert & Hintze, 2000).

Treatment integrity and implementation. As a consultant and consultee progress through the consultation process, plans and strategies for behavior change of the client are discussed and determined. However, despite these agreed-upon interventions, consultation does not ensure that interventions are carried out. In their research on treatment integrity in school-based behavioral consultation, Wickstrom, Jones, LaFleur, and Witt (1998) deemed identification of a treatment as a necessary but insufficient condition for behavior change in students. Other research indicates that proper implementation of treatments is sometimes assumed instead of assessed (Gresham, 1989) and that consultees may not implement interventions effectively (Noell et al., 2005). The degree to which an intervention plan is implemented as intended is referred to as treatment integrity (Gresham, 1989; Wilkinson, 2006). Treatment integrity is influential to the behavioral consultation process in that it is related to treatment outcomes and results in better client outcomes (Hagermoser Sanetti & Kratochwill, 2008). In addition, low levels of treatment implemenatation can possibly lessen treatment effectiveness, treatment efficiency, and treatment predictability (Hagermoser Sanetti & Kratochwill, 2008).

Several factors have been hypothesized to be linked to treatment integrity and implementation. In school settings, Gresham (1989) identified (a) complexity of treatments, (b) time required to implement treatments, (c) materials/resources required for treatments, (d) number of treatment agents required, (e) perceived and actual effectiveness of treatments, and (f) motivation of treatment agents as being related to treatment integrity. The degree of the client's problem, treatment acceptability, treatment complexity, and perception of treatment effectiveness may also be related to treatment integrity (Wickstrom et al. 1998).

A variety of methods are available to educational professionals to aid in the measurement and assessment of treatment integrity in school settings. Permanent products, direct observation of treatment implementation, consultee self-reports, and interviews may all be used to collect treatment integrity data (Hagermoser Sanetti & Kratochwill, 2008; Wilkinson, 2006). Permanent products are products that are generated as a result the intervention process, such as progress monitoring charts. Permanent products are beneficial in that they are efficient and easy to use, may be used across multiple clients, and minimize reactivity. Self-reports require consultees to report the degree to which they themselves have implemented interventions as intended. Measures may be completed following an intervention session or school day, but may be inaccurate due to underestimation or overestimation by consultees. Additionally, consultants may conduct interviews with consultees or complete ratings to ascertain levels of treatment integrity.

Several strategies may be utilized by consultants in order to promote treatment integrity, including performance feedback, treatment monitoring interviews, and intervention protocols. Performance feedback is one researched method of improving treatment integrity. This method involves the consultant examining treatment integrity by looking at actions taken by consultees

and resulting client behavior, and then providing consultees with some form of constructive feedback. Performance feedback serves to alter consultee treatment implementation, proficiency, and effectiveness (Hagermoser Sanetti & Kratochwill, 2008). Treatment monitoring interviews may also be added to the consultation process in order to promote proper intervention implementation. These interviews require the consultant and consultee to analyze a client's progress, discuss plan implementation barriers, and to decide how the existing plan should be altered, if necessary (Wilkinson, 2006). Martens and Ardoin (2002) recommended that promotion of properly implemented treatment plans could be achieved by providing consultees with interventions protocols. These protocols may contain checklists or scripts specifying how intervention elements are to be appropriately carried out.

Consultation effectiveness. Consultation effectiveness is concerned with the outcomes of consultation treatments in natural, school-based settings. A broad literature base indicates that school consultation is generally effective and is "correlated with positive gains in student achievement and social behavior" (MacLeod et al., 2001, p. 204). Summarizations of research investigating consultation outcomes and effectiveness have been conducted by several researchers (Medway & Updyke, 1985; Reddy, Barboza-Whitehead, Files, & Rubel, 2000; Sheridan et al., 1996).

An early meta-analysis of consultation outcome studies in the mental health field concluded that consultation has a positive impact on both consultee and client behavior and attitudes (Medway & Updyke, 1985). Statistical support was more pronounced for consultees than clients. None of the three major models of consultation demonstrated superiority, although the researchers suggested that mental health consultation may be preferential to impact consultee change while behavioral and organizational development consultation may be best to encourage client change.

A literature review conducted by Sheridan et al. (1996) similarly found that that consultation services result in favorable outcomes. Overall, positive results were found in 76% of reviewed

consultation studies. The researchers determined that behavioral consultation yielded the most positive results compared to mental health and other models, which is noteworthy considering the rigorous methodological standards of behavioral consultation research. The most negative results were found in studies that did not specify a theoretical basis, suggesting that consultation in a clear and well-constructed framework may be most effective. Methodologically, while the majority of studies used an experimental design, most utilized descriptive procedures to measure consultation effectiveness. Ratings and informant reports were the most frequently used outcomes measures, and point to a lack of sufficient studies using direct observations and multiple measures to assess consultation outcomes.

Reddy et al. (2000) conducted a meta-analysis on 35 child and adolescent consultation studies. In general, the researchers found consultation to be effective with this population in school, home, and community settings, with "small to large positive effects on global and specific client, consultee, and system variables" (p. 15). Results did not point to a single superior consultation model, although organizational development consultation produced the most robust effects. Behavioral consultation generated large positive outcome effects on clients and consultees, while mental health consultation yielded medium effects on consultees. Specifically, consultation had the highest degree of effectiveness with children with academic difficulties and/or externalizing behaviors. The study also found that consultation improved consultee skills, knowledge, perceptions, and attitudes. At the system level, consultation was most effective in increasing the use of psychological services and decreasing psychoeducational assessment referrals. Finally, the researchers found large outcome effects across all age groups studied (preschoolers through adolescents), with slightly larger effects for females versus males.

Attempts Made to Train Helping Professionals in Interpersonal Skills Development

Literature on interpersonal skill development by helping professionals has examined principles of training and specific helping skills programs. Much of the research, however, focuses on interpersonal training for psychotherapists or only provides a framework for teaching (and not specific material and objectives). Narrative and meta-analytic research on helping skills training programs was examined by Hill and Lent (2006) in order to determine important aspects of helping skills training, and to gain further understanding of the training process. They found that Carkhuff's (1972) Human Relations Training and Ivey's (1971) microcounseling are two helping skills training programs that promoted psychotherapist skill acquisition. Human Relations Training includes a movement through three stages of self-exploration, understanding, and action by the therapist and client, while microcounseling involves the therapist progressing through a pyramid of increasingly complicated helping skills. However, only global conclusions regarding the effectiveness of these programs were found in reviewed studies, and many of these had methodological problems. The review also determined that instruction, modeling, and feedback methods of instruction are all effective in teaching helping skills, with feedback and multimethod training producing the best results. Hill and Lent concluded that future research should be methodologically current and sound, and investigate training program effectiveness, specific training methods, and moderators of training variables.

Doo (2006) conducted a case study to determine what factors positively and negatively influence learner's interpersonal skills in an online training program. The researcher stated that "the actual execution of newly encountered interpersonal skills is important for successful learning outcomes, making skills practice critical to interpersonal skills training" (p. 265), and structured an online interpersonal skills training to (a) provide a verbal topic overview, (b) show

behavior models through video clips, (c) offer learning points, (d) offer self-practice opportunities, and (e) give self-assessment criteria. Doo concluded that simple cognitive understanding of learned skills limits learning outcomes, while facilitating interpersonal skill practice is vital to successful online training. The researcher further suggested that training programs should be engaging, take place in leaning environments that promote practice, and employ mental practice.

With the aim of structuring a helping skills program for novice psychotherapists, Hill, Stahl, and Roffman (2007) discussed necessary elements of training programs to enhance helping relationships of therapists and clients. Five major principles provide the framework for their helping skills training model:

1. Trainers should respect and capitalize on the natural helping skills of trainees, and modify existing communication abilities.
2. Training should initially focus on trainees rather than clients, in order to promote self-awareness and personal development.
3. Skills should be taught one at a time to trainees until mastery, when skill integration can then take place.
4. Foundational exploration of helping skills should be the focus of early training so that fluency is promoted.
5. Skills should be taught in a flexible rather than particular manner.

The researchers also provide four primary helping skills training program components:

1. Instruction and modeling methods of teachings.
2. Varied forms of practice (small groups, role plays) for trainees and feedback (shaping, coaching) from trainers.

3. Self-reflection in a safe and supportive environment.

4. Incorporation of empathy, self-awareness, and therapy theory and research training.

While Hill et al.'s conclusion recognized the inherent difficulties of helping skills training, the researchers offered specific hypotheses to be tested by future research and emphasized its importance, stating "given the centrality that training plays in our graduate programs in the mental health professions, it is crucial that we begin to approach this task in a more scientific manner and learn what works and what does not." (p. 369).

The Nature of Analogue Research and Considerations

Consultation arrangements are found in a variety of natural settings including homes, schools, and office buildings. Research conducted in these environments, however, can be difficult to control, and leave the manipulation of variables unfeasible. Analogue research grants several advantages over field research, and can be defined as "laboratory research that attempts to mimic real life and controls as many extraneous variables as possible, sometimes manipulating the independent variable" (Hill & Corbett, 1993, p. 14). Gelso (1979) pointed to control, manipulation, and vigor as virtues of experimental analogue research, and stated that these types of studies can answer questions about consultation and related factors. However, Gelso also indicated that analogue studies can oversimplify variables of interest and lack generalizability to natural settings. Boundary conditions that should be considered when in analogue helping research were outlined by Strong (1971) in order to facilitate the generalization of results to counseling settings. These conditions are (a) counseling is a conversation among people, (b) status differences between helpers and clients constrain conversation, (c) duration of contact is variable, (d) clients are motivated to change, and (e) many clients are distressed and invested in behavior change. Strong concluded that attention to these boundary conditions can bridge the

gap between analogue and field research. Analogue designs are particularly suitable to research investigating specifics of consultation, helper and client characteristics, and when there are conflicts between practice and research goals (Munley, 1974). Hill and Corbett (1993) similarly noted that "analogue designs could be quite appropriate for some research questions that are not tied to the ongoing therapy context, such as clients' initial attraction to therapists" (p. 15).

CHAPTER III: METHOD

Participants

The consultant participants in the study were nine female graduate students enrolled in either the MA/CAS School Psychology program or PhD Pediatric School Psychology program at a large, southeastern university. [1] Six consultants were in their second year of a school psychology training program, and 3 were in their first year. The consultee participants in the study were 30 undergraduate students from a large, southeastern university enrolled in an introductory psychology course. Sixteen consultee participants were male and 14 were female. Of the 30 participants, 21 were in their first year of college, 6 were in their second year, and 2 were in their third year. Only one consultee participant was in his/her fourth year. The consultee participants were also asked to report what part of the United States were from, and 70% reported they were from the South, 20% were from the North, 7% were from the Midwest, and 3% from the West. No other demographic information was collected from participants. Nine other undergraduate students originally registered for the study but subsequently did not attend. Participating undergraduate students received research participant credit for participating in the study, which is a requirement for introductory courses. Descriptive statistics for each demographic variable are reported in Table 1.

Table 1

Consultee Demographic Characteristics

Gender		Frequency	Percentage
	Male	16	53%
	Female	14	46%
Experience			
	Freshman	21	70%
	Sophomore	6	20%
	Junior	2	7%
	Senior	1	3%
Geographic Region			
	South	21	70%
	North	6	20%
	Midwest	2	7%
	West	1	3%

Setting

The study took place on a large, public university campus in the southeastern United States. Consultants arrived to a designated classroom in the psychology department and completed either the interpersonal skills training on a University computer or the control training. Consultants then joined together in one classroom and completed the problem solving training conducted by the researcher. Following the training, consultants separated back to their original classrooms and conducted a problem solving activity with two to three consultees, individually. Consultees arrived to a designated classroom in the psychology department, and were instructed to meet with a randomly assigned consultant.

Instrumentation

Study instruments included a demographic survey, covariate measures, and dependent variable measures. Demographic surveys provided the researcher with background information on study participants. The covariate measure provided statistics on variables not manipulated by the researcher. Dependent variable measures allowed the researcher to analyze the effect of the interpersonal skills training program on treatment acceptability, perceived consultant effectiveness, follow through, and treatment implementation.

Demographic surveys and covariate measures. Consultants and consultees completed a demographic survey (see Appendix A) requesting information regarding gender, years of education, and geographic home region. Consultants and consultees completed a positively worded, 19-item, 5-point Likert scale developed by the researcher in order to assess preexisting levels of social skills (see Appendix B). The scale was based on The Walker-McConnell Scale of Social Competence and School Adjustment (Walker & McConnell, 1995). The Adolescent Version of this scale is a 53-item, 5-point Likert scale containing four subscales of self control, peer relations, school adjustment, and empathy. Reliability for this measure is reported to be over .80, and validity is reported to be between .69 and .90. The preexisting social skills scale used in the experiment pulled items from the peer relations and empathy subscales, and scaled from the participant "never" demonstrating the interpersonal skill to the participant "frequently" demonstrating the interpersonal skill. Three questions regarding preexisting levels of compliance, developed by the researcher, were also included on the social skills scale.

Dependent variable measures. The first dependent variable, treatment acceptability, measured consultee views of both the treatment proposed by consultants and of the consultants themselves. Treatment acceptability was measured using the Treatment Acceptability

Questionnaire (TAQ; see Appendix C; Hunsley, 1992;), a six-item, 7-point Likert scale completed by the consultee. The TAQ was created based on social validation, treatment acceptability, and social influence research, and was particularly relevant for the study as it emphasizes "that the perceptions of the therapist as knowledgeable and trustworthy are strongly related to the effectiveness of therapeutic interventions" (Hunsley, 1992, p. 56). The TAQ requested information from the consultees about their reactions to the acceptability, ethics, effectiveness, and negative side effects of the treatment, and the knowledge and trustworthiness of the consultant. Several studies found that the TAQ has acceptable internal consistency, with Cronbach alpha values ranging from .74 to .81 (Hunsley, 1992). The same studies indicated that the TAQ has good test-retest reliability, with an r of .78.

A perceived consultant effectiveness scale (see Appendix D) of 21, 7-point Likert-style items developed by the researcher measured the second dependent variable of perceived consultant effectiveness. Fourteen items of this rating scale were based on The Consultant Effectiveness Scale (CES; Knoff, Sullivan, & Liu, 1995), which is a 52-item, 5-point Likert scale consisting of items that load into the four factors of interpersonal skills, problem-solving skills, consultation process and application skills, and ethical and professional skills. This scale was a strong basis for measuring consultants' interpersonal skills because 24 of the 52 items weigh into the interpersonal skills factor, which:

> describes those behaviors and skills that consultants use to build and maintain rapport, trust, and positive relationships with their consultees such that the consultation process can ultimately focus on problem solving, intervention development and implementation, and measurable and socially valid outcomes (Knoff et. al., 1995, p. 492.).

The CES also contains 14 items that load into problem solving skills, a factor that "describes those behaviors and skills that consultants use to identify and analyze referred problems and to develop the consultation momentum that results in the successful implementation of agreed-upon interventions" (Knoff et. al., 1995, p. 492). The perceived consultant effectiveness scale was completed by consultees based on their experience with a consultant during the problem solving activity. Questions assessed aspects of interpersonal skills such as empathy and warmth, and problem solving skills such as questioning and active listening.

Seven questions of the perceived consultant effectiveness scale were based on the Consultant Evaluation Form (CEF; Erchul, 1987). The CEF is a 12-item, 7-point Likert scale that measure consultee levels of agreement with descriptive statements about consultants. Items focused on aspects of consultants such as encouragement, solution generation, and usefulness. Erchul and Chewning (1990) found the CEF to have a coefficient alpha of .95.

The third dependent variable of interest, follow through, measured how many steps of a follow-up activity (if any) consultees completed (see Appendix E). The follow-up activity instructed consultees to complete three steps after leaving the study:

1. Send an e-mail to the researcher with answers to given questions, including whether or not the suggested intervention was implemented.
2. Leave an index card containing specific information in a box on campus.
3. Complete a five-question online survey.

Consultees received a score ranging from 0 to 3 depending on the number of steps completed. The fourth dependent variable of interest, treatment implementation, measured if consultees did or did not implement the intervention suggested by the consultant. Consultees received a score

of 1 if they implemented the treatment and 0 if they did not implement the treatment. This score was depended upon completing the first step of the follow through measure.

Procedure

To recruit consultee participants, the researcher made the study available on Experimentrak, the university's website for undergraduate research participation. Consultees were randomly assigned to work with a consultant in the experimental or control group. Random assignment was completed by pairing the consultees, in the order they arrived, with a randomized list of consultants. Consultant participants were recruited on a voluntary basis following an informational recruitment session (see Appendix G) led by the principal investigator. Consultant participants were randomly assigned to the experimental or control group. Random assignment was completed by pairing a list of the consultants to a list of ones and twos created by a random number generator.

Consultants signed an informed consent form prior to beginning the study, and also completed the demographic survey and preexisting social skills scale. The researcher indicated to experimental group consultant participants that they would complete a 30-minute online program consisting of videos, narratives, and questions. The researcher indicated to control group consultant participants that they would complete a 30-minute activity consisting of reading articles and writing article summaries. Both groups of consultants were told that after finishing these activities they would complete problem solving training led by the researcher, and would then consult with undergraduate students. Consultees signed an informed consent form and also completed the demographic survey and preexisting social skills survey upon arriving for the study.

Independent Variable

The interpersonal skills training program was computer-based through Qualtrics, a web-based survey application. In order to access the training program on Qualtrics, the five consultant experimental group participants were e-mailed a link immediately prior to the start of the study. The interpersonal skills training program included a series of instructional narratives, pictures, audio clips, and video clips interspersed with several types of test questions, such as multiple choice, matrix, and short answer. The interpersonal skills training program was developed based on key characteristics of effective helping professionals (Dougherty, 2009; Hill, 2004; Ivey & Ivey, 1999; Knoff et. al., 1995; Kurpius & Rozecki, 1993) and strategies for building healthy interpersonal relationships identified by Gottman and DeClaire (2001) and Driver and Gottman (2004). The training program divided interpersonal skill development into seven instructional modules: eye contact, vocal qualities, verbal tracking, body language, facial expressions, encouragers and bid responses. Specifically, the eye contact module covered subtopic such as mutual gaze, and contained 7 multiple choice questions, 1 identification question, and 1 sorting question. The vocal qualities module covered subtopics such as pitch, volume, and speech rate, and contained 9 multiple choice questions and 4 audio clip questions. The verbal tracking module covered subtopics such as selective attention, and contained 11 multiple choice questions and 2 short answers. The body language module covered subtopics such as open and closed stances, and contained 8 multiple choice, 1 matrix question, 1 sorting question, and 1 short answer. The facial expressions module covered subtopics such as Duchenne smiles, and contained 2 multiple choice questions. The encouragers module covered subtopics such as head nods, minimal utterances, and silence, and contained 7 multiple choice questions, 4 video clip questions, 1 matrix question, and 1 short answer. Finally, the bid

responses module covered subtopics such as turning toward, turning away, and turning against, and contained 9 multiple choice questions, 1 matrix question, and 2 short answers. In sum, the interpersonal skills training program contained 75 questions: 55 multiple choice questions, 3 matrix questions, 1 identification question, 2 sorting questions, 4 audio clip questions, 4 video clip questions, and 6 short answers. Interpersonal skills training program topic, subtopics, and question types are presented in Table 2. Consultants took between 24 and 40 minutes to complete the training program (M = 31, SD = 5.87). The control training program required the four consultant control group participants to read news articles and write article summaries. The news articles were neutral in content.

Table 2

Interpersonal Skills Training Program Topics, Subtopics, and Question Types

Topic/Subtopic	Multiple Choice	Audio/ Video	Matrix	Short Answer	Other
Eye Contact: Effective ways to use eye contact, mutual gaze, appropriate amounts of eye contact.	9	0	0	0	2
Vocal Qualities: Pitch, volume, speech rate, communication of feelings and ideas	9	4	0	0	0
Verbal Tracking: Staying on topic/following client concerns, selective attention	11	0	0	2	0
Body Language: Stances, authenticity, nonverbal communication	8	0	1	1	1
Facial Expressions: Nonverbal communication, smiling, Duchenne smile	2	0	0	0	0
Encouragers: Nonverbal versus verbal encouragers, coercion, head nods, positive facial affect, minimal utterances, common phrases, silence	7	4	1	1	0
Bid Responses: Bids, turning toward, turning away, turning against	9	0	1	2	0
Sum	55	8	3	6	3

The problem solving training program (which both the experimental and control group participated in) was based on two major stages of problem solving commonly found in behavioral school consultation: problem identification and problem analysis (Kratochwill & Bergan, 1990). The researcher led consultant participants through a review of steps to be completed during consultation, and provided information and answered questions about the problem solving activity procedure. Consultants were instructed to consult with undergraduate student consultees about one of four difficulties commonly faced by college students (homesickness, stress, relationship issues, and academic difficulties). After completing forms (informed consent, demographic survey, and preexisting social skills survey) consultees were instructed to go to a classroom, join their assigned consultant, and proceed with a problem solving activity. The problem solving activity progressed in a question and answer format, as consultants followed a problem solving protocol (see Appendix F) to guide them through consultation steps. At the end of the problem solving activity consultants suggested an intervention to consultees regarding their identified common difficulty, and provided follow-up activity information. The follow-up activity directed consultees to complete three steps (previously described). Directly following completion of the problem solving activity consultees completed surveys rating their perception of consultant effectiveness (using the perceived consultant effectiveness scale) and acceptability of the suggested intervention (using the treatment acceptability questionnaire). Consultants were debriefed following consultation completion, and were fully informed of the study purpose and notified as to which group (experimental or control) they were a part of.

CHAPTER VI: RESULTS

Descriptive Statistics and Data Screening Results

Data was first examined for normality in order to address the assumptions of parametric statistical analysis. Both continuous dependent variables, treatment acceptability and perceived consultant effectiveness, were negatively skewed at -1.32 and -1.31, respectively, indicating a slight deviation from normality and more positive ratings overall. These dependent variables were highly correlated (r = .802), suggesting multicollinearity. Preexisting social skills and prior levels of compliance ratings did not demonstrate skewness but were distributed platykurtically, suggesting generally low variability among scores. These variables were correlated at r = .59, suggesting some redundancy. In order to examine homogeneity of variance, residual plots were examined. With regard to the treatment variable as well as other variables, expected residuals did not differ markedly, suggesting generally normal distribution of residuals.

Treatment Acceptability

The first research hypothesis expected differences between the experimental and control group on a measure of treatment acceptability. Treatment acceptability was a continuous dependent variable on a 7-point Likert scale. No significant main effect was notable for this variable. Results of an independent samples t test indicated that mean treatment acceptability scores of the experimental group (M = 38.53, SD = 4.03) did not differ from the mean of the control group (M = 38.93, SD = 3.22), $t(26.68) = -.30$, $p = .76$, assuming unequal variance.

Perceived Consultant Effectiveness

The second research hypothesis expected differences between the experimental and control group on a measure of perceived consultant effectiveness. Perceived consultant effectiveness was a continuous dependent variable on a 7-point Likert scale. No significant main

effect was notable for this variable. Results of an independent samples *t* test indicated that mean perceived consultant effectiveness scores of the experimental group (M = 138.27, SD = 11.93) did not differ from the mean of the control group (M = 137.93, SD = 13.13), $t(27.56) = .087$, $p = .93$, assuming unequal variance.

Composite Follow Through

The third research hypothesis expected differences between the experimental and control group on a composite follow through measure. Composite follow through was an ordinal dependent variable, ranging from 0 to 3 steps of follow through completed. No significant main effect was notable for this variable. While observable mean differences were present in composite follow through scores between the two groups, an independent samples *t* test indicated that scores of the experimental group (M = 1.2, SD = 1.2) did not significantly differ from the mean of the control group (M = .73, SD = .96), $t(26.12) = 1.14$, $p = .27$, assuming unequal variance.

Treatment Implementation

The fourth research hypothesis expected differences between the experimental and control group on measures of treatment implementation. Treatment implementation was a binary dependent variable indicating if consultees did or did not implement the suggested treatment. Although a higher proportion of consultees in the experimental group reported implementing the intervention suggested by the consultant than those in the control group (Figure 1), the proportion of those implementing the treatment did not differ significantly from expected or chance levels of implementation ($\chi^2 = 1.43$, $p = .21$).

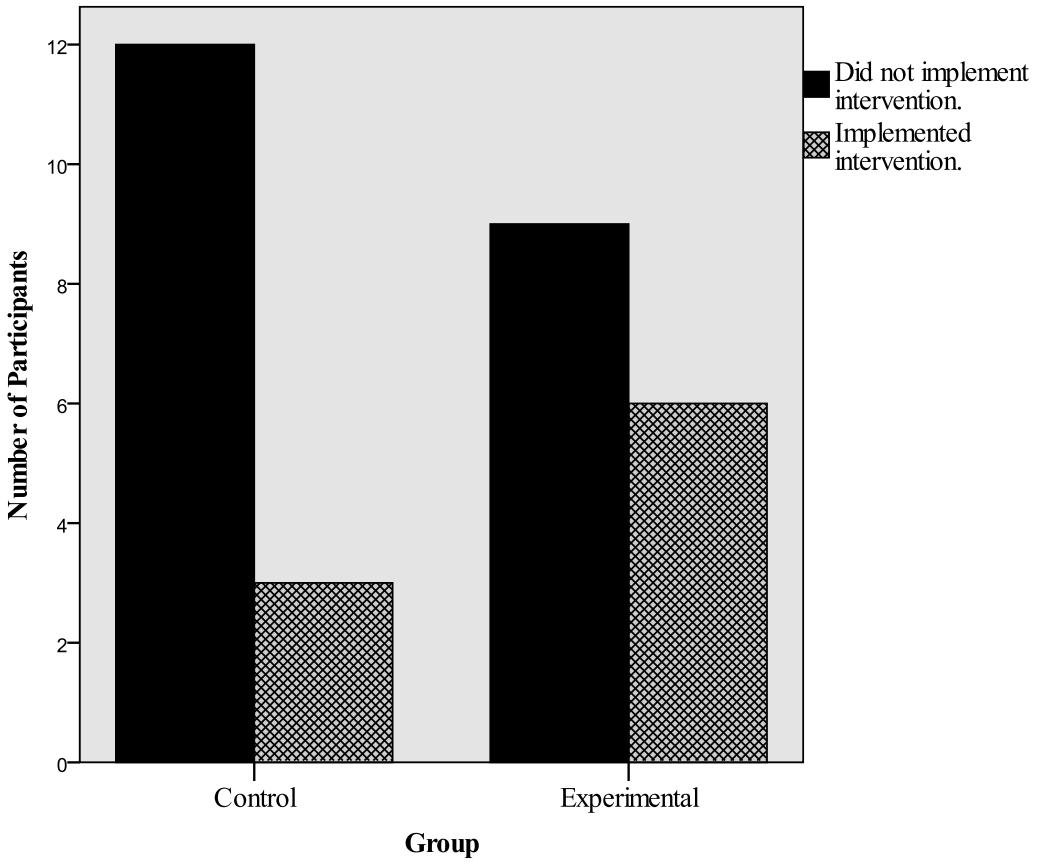

Figure 1. This figure represents the number of consultee participants in each group who did and did not implement the intervention suggested by the consultant. Six experimental group consultees implemented the intervention, compared to only three control group consultees.

Power Analysis

The failure to detect main effects was not likely the result of low power for the treatment acceptability and perceived consultant effectiveness measures, as the observed levels of power (1 – β) were .93 for the effectiveness outcome and .77 for the acceptability outcome. However, the experiment appeared to be weakly powered to detect effects on the composite follow through variable (.26) and the treatment implementation variable (.17). This suggests that more participants were necessary to detect even a small effect size.

Regression Analysis

To examine the contribution of unique variance among a subset of other factors that may covary with the perceived consultant effectiveness score, an ordinary least squares regression model was used. Because this research is exploratory, the first model used simultaneous entry to examine the contributions of (a) consultee gender, (b) preexisting levels of social skills of the consultee, (c) preexisting levels of social skills of the consultant, (d), experience of the consultant, (e) experience of the consultee, and (f) treatment group. The intercorrelations for some of these variables is displayed in Table 3. Results of the full model were significant, R^2 = .493, $F(6,23) = .372$, $p = .01$. The most significant proportion of variance was explained by experience of the consultee, as measured by grade level ($p < .01$). Although consultee experience accounted for most variability, the standard regression coefficient was negative.

Table 3

Intercorrelations Between Study Variables

Measure	Perceived Consultant Effectiveness	Consultee Preexisting Social Skills	Consultant Preexisting Social Skills
Perceived Consultant Effectiveness	1.000	-----	-----
Consultee Preexisting Social Skills	.460	1.000	-----
Consultant Preexisiting Social Skills	.124	.279	1.000

Inspection of the data file indicated that 70% of consultees (n = 21) were first year students and 20% were second year students, suggesting an unequal proportion of students at different levels of experience. Similarly, an unequal proportion of first year (30%) and second year (70%) graduate student consultants was noted. Because both experience variables were of concern, they were removed from the model. Removing the consultee experience variable from the model resulted in a nonsignificant full model, $R^2 = .255$, $F(4,25) = 2.142$, $p = .10$, but promoted the consultee social skill variable as a significant predictor of perceived consultant effectiveness ($p = .009$). The significance of the full model, with regard to the contributions of experience and prior social skill variables, suggests that a linear combination of factors may explain why main effects were not observed for perceived consultant effectiveness despite an adequately powered test.

A least squares regression model was additionally used to examine the contribution of variables to treatment implementation scores, with a simultaneous exploratory model followed by the removal of experiential variables. No linear combination of variables was found to adequately predict the follow through outcome, suggesting that no covariates accounted for treatment implementation above and beyond the treatment variable itself. The final outcome analyzed in the study was dichotomous, and was a measure of whether or not the consultee reported implementing the intervention. As reported earlier in this section, no difference between treatment and control group was notable for this variable. Results of a binary logistic regression analysis, however, suggested that treatment implementation may have been impacted by covariates. Using treatment group as the fixed factor, gender, social skills and experience of the consultant and consultee were entered as covariates into the model. Results of the ordinal regression model were significant ($\chi^2 = 12.85$, $p = .03$) and pseudo R-square effect sizes ranged

from .35 to .50. These results suggest that treatment implementation was likely impacted by a linear combination of factors beyond the control of the experimenter. Interestingly, results of a discriminant function analysis found that both treatment acceptability and perceived consultant effectiveness did not adequately predict treatment implementation.

CHAPTER V: DISCUSSION

The primary objective of this research study was to examine the added value of an interpersonal skills training program to an analogue consultation arrangement. Ratings of treatment acceptability, perceived consultant effectiveness, follow through, and treatment implementation were all investigated. The results of the study aim to be helpful in providing information towards the creation of an explicit, uniform method to teach interpersonal skills to school psychology graduate students in order to enhance the effectiveness of the school-based consultation processes.

Impact of Interpersonal Skills Training on Key Outcomes

The impact of an interpersonal skills training program on four key outcomes (treatment acceptability, perceived consultant effectiveness, follow through, and treatment implementation) of an analogue problem solving activity were examined. Each consultee rated the treatment acceptability of an intervention suggested by a consultant at the conclusion of a problem solving activity. Consultees who met with consultants who participated in the interpersonal skills training program did not give significantly higher ratings of treatment acceptability than consultees who worked with consultants who did not participate in the interpersonal skills training program. Consultees additionally completed ratings of perceived consultant effectiveness based on their participation in the problem solving activity. Consultants who participated in the interpersonal skills training program did not receive significantly higher ratings of effectiveness than consultants who did not participate in the interpersonal skills training program.

Following completion of required study participation, consultees received composite follow through scores determined by the number of problem solving follow through steps

(provided by the consultants) completed. Consultees who met with consultants who participated in an interpersonal skills training program did not complete significantly more steps of the follow through measure than consultees who worked with consultants who did not participate in the interpersonal skills training program. Consultees also received a treatment implementation score indicating if they did or did not implement the intervention suggested by consultants during the problem solving activity. Consultees who met with consultants who participated in the interpersonal skills training program were not significantly more likely to implement the treatment than consultees who worked with consultants who did not participate in the interpersonal skills training program. However, a great power level in the study could have allowed for the detection of significant results for the follow through and treatment implementation measures.

Covariate Contributions to Key Outcomes

The factors of consultee gender, preexisting social skills of consultants and consultees, experience levels of consultants and consultees, and treatment group were analyzed as possible contributors to key outcomes. Experience of the consultee accounted for the most significant proportion of variance in the perceived consultant effectiveness variable. Experience levels were measured by grade level, ranging from one year of undergraduate experience to four years of undergraduate experience. Higher levels of consultee experience were associated with lower ratings of perceived consultant effectiveness. No covariates were significantly associated with how many steps of the follow through activity were completed. A combination of consultee gender, consultee and consultant preexisting social skills, and consultee and consultant experience covariates impacted whether or not consultees implemented interventions suggested by consultants.

Consultant and Consultee Experience

Martin and Curtis (1980) found that both age and experience are significant factors in consultation outcomes between school psychologists and teachers. Specifically, poor consultation outcomes were associated with older teachers and those with more experience while successful consultation outcomes were found when psychologist-teacher dyads were closely matched in age and experience. As the current study is an analogue to consultation, experience was measured as years of undergraduate schooling or graduate schooling of consultees and consultants, respectively. Negative consultation outcomes were related to consultees with more experience, determined by lower consultee ratings of perceived effectiveness following a problem solving activity.

Preexisting Social Skills

Past research suggests that social skills are likely to impact consultation outcomes, as they relate to the idea of teamwork and shared-goal orientation (Erchul et al., 1992). When consultees and consultants agreed they were a good team, consultees were more likely to see consultation as a beneficial process, be more satisfied, and rate consultants as effective. The current study found that preexisting social skills of participating consultees were predictive of consultee scores of perceived consultant effectiveness when experience was removed as a variable.

Generalizability of Findings

The analogue consultative nature of the current study allowed greater degrees of control and manipulation by the researcher than would have been allowed in a counseling or school-based setting. This design was appropriate to address the research objective and research questions, as they were preliminary in nature and not associated with an ongoing therapy

framework. However, results have limited external validity and may not generalize to school psychologist-teacher dyads in educational settings.

Implications for Consultation

School psychologists engage in consultation in order to provide a problem solving service and to convey knowledge and skills to consultees that they may use in the future. While the consultative processes and the importance of consultation outcomes are emphasized, the value added to the problem solving relationship by interpersonal skills training is paid little attention. This study indicates that a variety of factors including the gender, experience, and social skills of both consultees and consultants impact key consultation outcomes. While these factors may be out of the control of the training programs that prepare graduate students to work as consultants, results of the study should be used to improve consultation efficacy. The current study indicates that an explicit, uniform interpersonal skills training program can be utilized by graduate programs to promote the importance of consultant-consultee relationships within consultation contexts.

Implications for Future Research

Future research should continue to examine whether interpersonal skills training adds value to problem solving in helping relationships. In order to more closely examine the impact of both consultee and consultant experience on outcomes, participants with a broad range of years spent in a profession should be included in studies. As a number of factors accounted for the results of the current study, future analogue research should be vigilant in controlling and analyzing predictor variables. Interpersonal skills training research should also be conducted in applied settings. Initially, this research could include school psychology students paired with student teachers, and expand into more formal school and therapy sessions. This will aid in

examining the relationship between interpersonal skills and consultation outcomes when consultees from the educational field are participants. Finally, other explicit methods of teaching interpersonal skills should be developed and researched. By examining other methodologies of interpersonal skills training, researchers may find an express method of training that results in heightened consultation effectiveness.

Limitations

One limitation of the current study was that no actual client was involved in the study. In a naturalistic setting, a consultee would typically seek out a consultant in order to help solve a client problem. However, by helping solve client problems, consultees simultaneously remedy their own professional difficulties with clients, making the absence of a client in the current study appropriate. A second limitation was that a Type III error may have potentially been made through a "failure to consider the interactive effects of an intervention" (Wade, 2001, p.1). Factors not examined in the study may have had interactive effects and lead to an error in data interpretation. These factors could include the limited time period for each problem solving activity between a single consultee and consultant to occur, the small number of common college difficulties (four) in the problem identification stage to choose from, and the nature of the training of consultants both in the study and in the school psychology graduate program. A third limitation was the unequal proportion of both consultee and consultant participants at different levels of experiences, which restricted the heterogeneity of the sample. A fourth limitation was that fidelity checks were not done during the study, therefore there was no way to ensure that consultants completed all steps of the problem solving protocol, and completed these steps in order.

Conclusion

Consultee and consultant variables including gender, years of experience, and social skills play a role in consultation in analogue settings. These variables impact how an interpersonal skills training program for consultants affects key consultation outcomes including perceived consultant effectiveness and treatment implementation. While some factors may be out of the control of the training programs that prepare graduate students for consultation, results of the study can be used to inform future research that examines how school psychology programs approach interpersonal skills training. Results of the study will also be useful in providing information toward the creation of an explicit method of teaching interpersonal skills to school psychology graduate students in order to enhance the effectiveness of the school-based consultation process.

References

Anton-LaHart, J. & Rosenfield, S. (2004). A survey of preservice consultation training in school psychology programs. *Journal of Educational & Psychological Consultation*, *15*(1), 41-62.

Bergan, J. R. (1977). *Behavioral consultation.* Columbus, OH: Charles E. Merrill.

Brown, D., Pryzwansky, W. B., & Schulte, A. C. (1991). *Psychological consultation: Introduction to theory and practice* (2nd ed.). Needham Heights, MA: Allyn and Bacon.

Brown, D., Pryzwansky, W. B., & Schulte, A. C. (2001). *Psychological consultation: Introduction to theory and practice* (5th ed.). Needham Heights, MA: A Pearson Education Company.

Buysse, V., & Wesley, P. W. (2005). *Consultation in early childhood settings.* Baltimore, MD: Paul H. Brookes Publishing Co.

Caplan, G., Caplan, R. B., &, Erchul, W. P. (1994). Caplanian mental health consultation: Historical background and current status. *Consulting Psychology Journal: Practice and Research*, *46*(4), 2-12.

Carkhuff, R R. (1972). *The art of helping.* Amherst, MA: Human Resource Development Press.

Chafouleas, S. M., Briesch, A. M., Riley-Tillman, T. C., & McCoach, D. B. (2009). Moving beyond assessment of treatment acceptability: An examination of the factor structure of the Usage Rating Profile – Intervention (URP-I). *School Psychology Quarterly, 24*(1), 36-47.

Conoley, J. C., & Conoley, C. W. (1992). *Consultation: A guide to practice and training* (2nd ed.). New York: Allyn and Bacon.

Costenbader, V., Swartz, J. & Petrix, L. (1992). Consultation in the schools: The relationship between preservice training, perception of consultative skills, and actual time spent in consultation. *School Psychology Review, 21*(1), 95-108.

Cunningham, J., & Oakland, T. (1998). International School Psychology Association guidelines for the preparation of school psychologists. *School Psychology International, 19*(1), 19-30.

Doo, M. Y. (2006). A problem in online interpersonal skills training: Do learners practice skills? *Open Learning, 21*(3), 263-272.

Dougherty, A . M. (2009). *Psychological consultation and collaboration in school and community settings.* Belmont, CA: Brooks/Cole.

Driver, J. L., & Gottman, J. M. (2004). Turning toward versus turning away: A coding system of daily interactions. In P. K. Kerig & D. H. Baucom (Eds.), *Couple observational coding systems*. New Jersey: Lawrence Erlbaum Associates.

Eckert, T. L. & Hintze, J. M. (2000). Behavioral conceptions and applications of acceptability: Issues related to service delivery and research methodology. *School Psychology Quarterly, 15*(2), 123-148.

Erchul, W. P. (1987). A relational communication analysis of control in school consultation. *Professional School Psychology, 2*(2), 113-124.

Erchul, W. P. (1993). Selected interpersonal perspectives in consultation research. *School Psychology Quarterly, 8*(1), 38-49.

Erchul, W. P. (2003). Communication and interpersonal processes in consultation: Guest editor's comments. *Journal of Educational & Psychological Consultation, 14*(2), 105-107.

Erchul, W. P., & Chewning, T. G. (1990). Behavioral consultation from a request-centered relational communication perspective. *School Psychology Quarterly*, *5*(1), 1-20.

Erchul, W. P., Covington, C. G., Hughes, J. N., & Meyers, J. (1995). Further explorations of request-centered relational communication within school consultation. *School Psychology Review*, *24*(4), 621-632.

Erchul, W. P., Hughes, J. N., Meyers, J., & Hickman, J. A. (1992). Dyadic agreement concerning the consultation process and its relationship to outcome. *Journal of Educational & Psychological Consultation*, *3*(2), 119-132.

Erchul, W. P., & Martens, B. K. (2002). *School consultation: Conceptual and Empirical bases of practice* (2nd ed.). New York: Kluwer Academic Publishers.

Erchul, W. P., & Sheridan, S. M. (2008). Overview: The state of scientific research in school consultation. In W. P. Erchul & S. M. Sheridan (Eds.), *Handbook of research in school consultation* (pp. 3 – 12). New York, NY: Taylor & Francis Group, LLC.

Fagan, T. K., & Wise, P. S. (2000). *School psychology: Past, present, and future* (2nd ed). Bethesda, MD: National Association of School Psychologists.

Gelso, C. J. (1979). Research in counseling: Methodological and professional issues. *The Counseling Psychologist*, *8*(3), 7-35.

Gottman, J. M., & DeClaire, J. (2001). *The relationship cure: A 5 step guide to strengthening your marriage, family, and friendships.* New York, NY: Three Rivers Press.

Gottman, J. M. & Driver, J. L. (2005). Dysfunctional marital conflict and everyday marital interaction. *Journal of Divorce & Remarriage*, *42*(3-4), 63-78.

Gresham, F. M. (1989). Assessment of treatment integrity in school consultation and prereferral intervention. *School Psychology Review*, *18*(1), 37-50.

Gutkin, T. B., & Curtis, M. J. (1982). School-based consultation: Theory and techniques. In C. R. Reynolds & T. B. Gutkin (Eds.), *The handbook of school psychology* (pp. 796 – 828). New York, NY: Wiley & Sons, Inc.

Hagermoser Sanetti, L. M. & Kratochwill, T. R. (2008). Treatment integrity in behavioral consultation: Measurement, promotion, and outcomes. *International Journal of Behavioral Consultation and Therapy, 4*(1), 95-114.

Hayes, J. (2002). *Interpersonal skills at work* (2nd ed.). New York, NY: Routledge.

Hill, C E. (2004). *Helping skills: Facilitating exploration, insight, and action* (2nd ed.). Washington, DC: American Psychological Association.

Hill, C. E. & Corbett, M. M. (1993). A perspective on the history of process and outcome research in counseling psychology. *Journal of Counseling Psychology*, *40*(1), 3-24.

Hill, C. E. & Lent, R. W. (2006). Helping skills training: Time to revive a dormant area of inquiry. *Psychotherapy: Theory, Research, Practice, Training*, *43*(2), 154-172.

Hill, C. E., Stahl, J., & Roffman, M. (2007). Training novice psychotherapists: Helping skills and beyond. *Psychotherapy: Theory, Research, Practice, Training*, *44*(4), 364-370.

Hunsley, J. (1992). Development of the Treatment Acceptability Questionnaire. *Journal of Psychopathology and Behavioral Assessment*, *14*(1), 55-64.

Ivey, A E. (1971). *Microcounseling: Innovations in interviewing training.* Springfield, IL: Charles C Thomas.

Ivey, A. E., & Ivey, M. B. (1999). *Intentional interviewing and counseling: Facilitating client development in a multicultural society.* Pacific Grove, CA: Brooks/Cole Publishing Company.

Jones, K. M., Wickstrom, K. F., & Friman, P. C. (1997). The effects of observational feedback on treatment integrity in school-based behavioral consultation. *School Psychology Quarterly*, *12*(4), 316-326.

Kazdin, A. E. (1980). Acceptability of alternative treatments for deviant child behavior. *Journal of Applied Behavior Analysis*, *13*(2), 259-273.

Knoff, H. M., Hines, C. V., & Kromrey, J. D. (1995). Finalizing the Consultant Effectiveness Scale: An analysis and validation of the characteristics of effective consultants. *School Psychology Review*, *24*(3), 480-496.

Knoff, H. M., Sullivan, P., & Liu, D. (1995). Teachers' ratings of effective school psychology consultants: An exploratory factor analysis study. *Journal of SchoolPsychology*, *33*(1), 39-57.

Kratochwill, T. R., & Bergan, J. R. (1978). Training school psychologists: Some perspectives on a competency-based behavioral consultation model. *ProfessionalPsychology*, *9*(1), 71-82.

Kratochwill, T. R., & Bergan, J. R. (1990). *Behavioral consultation in applied settings: An individual guide.* New York, NY: Plenum Press.

Kurpius, D. J., & Rozecki, T. G. (1993). Strategies for improving interpersonal communication. In J. E. Zins, T. R. Kratochwill, & S. N. Elliot (Eds.), *Handbook of consultation services for children: Applications in educational and clinical settings* (pp. 137 – 158). San Francisco, CA: Jossey-Bass Publishers.

MacLeod, I. R., Jones, K. M., Somers, C. L., & Havey, J. M. (2001). An evaluation of the effectiveness of school-based behavioral consulation. *Journal of Educational & Psychological Consultation*, *12*(3), 203-216.

Martens, B. K. & Ardoin, S. P. (2002). Training school psychologists in behavior support consultation. *Child & Family Behavior Therapy, 24*(1-2), 147-163.

Martens, B. K., & DiGennaro, F. D. (2008). Behavioral consultation. In W. P. Erchul & S. M. Sheridan (Eds.), *Handbook of research in school consultation* (pp. 147 – 170). New York, NY: Taylor & Francis Group, LLC.

Martens, B. K., Erchul, W. P., & Witt, J. C. (1992). Quantifying verbal interactions in school-based consultation: A comparison of four coding schemes. *School Psychology Review, 21*(1), 109-124.

Martens, B. K., Lewandowski, L. J., & Houk, J. L. (1989). Correlational analysis of verbal interactions during the consultative interview and consultees' subsequent perceptions. *Professional Psychology: Research and Practice, 20*(5), 334-339.

Martin, R. P. & Curtis, M. J. (1980). Effects of age and experience of consultant and consultee on consultation outcome. *American Journal of Community Psychology, 8*(6), 733-736.

Medway, F. J. (1979). How effective is school consultation?: A review of recent research. *Journal of School Psychology*, *17*(3), 275-282.

Medway, F. J. & Updyke, J. F. (1985). Meta-analysis of consultation outcomes studies. *American Journal of Community Psychology*, *13*(5), 489-505.

Munley, P. H. (1974). A review of counseling analogue research methods. *Journal of Counseling Psychology*, *21*(4), 320-330.

National Association of School Psychologists. (2000). *Standards for training and field placement programs in school psychology.* Bethesda, MD: NASP Publications.

Noell, G. H., Witt, J. C., Slider, N. J., Connell, J. E., Gatti, S. L., Williams, K. L. et al. (2005). Treatment implementation following behavioral consultation in schools: A comparison of three follow-up strategies. *School Psychology Review*, *34*(1), 87-106.

Reddy, L. A., Barboza-Whitehead, S., Files, T., & Rubel, E. (2000). Clinical focus of consultation outcome research with children and adolescents. *Special Services in the Schools, 16*(1-2), 1-22.

Reimers, T. M., Wacker, D. P., & Koeppl, G. (1987). Acceptability of behavioral interventions: A review of the literature. *School Psychology Review*, *16*(2), 212- 227.

Sheridan, S. M., Welch, M., & Orme, S. F. (1996). Is consultation effective? A review of outcome research. *Remedial and Special Education, 17*(6), 341-354.

Strong, S. R. (1971). Experimental laboratory research in counseling. *Journal of Counseling Psychology*, *18*(2), 106-110.

Wade, D. T. (2001). Research into the black box of rehabilitation: The risks of a Type III error. *Clinical Rehabilitation*, *15*(1), 1-4.

Walker, H. M., & McConnell, S. R. (1995). *Walker-McConnell Scale of Social Competence and School Adjustment.* San Diego, CA: Singular Publishing Group, Inc.

Wickstrom, K. F., Jones, K. M., LaFleur, L. H., & Witt, J. C. (1998). An analysis of treatment integrity in school-based behavioral consultation. *School Psychology Quarterly*, *13*(2), 141-154.

Wilkinson, L. A. (2006). Monitoring treatment integrity. *School Psychology International*, *27*(4), 426-438.

Witt, J. C., & Elliott, S. N. (1985). Acceptability of classroom intervention strategies. In T. R. Kratochwill (Ed.), *Advances in school psychology* (Vol. 4, pp. 251 – 288). Hillsdale, NJ: Erlbaum.

Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis*, *11*(2), 203-214.

Zins, J. E. & Erchul, W. P. (2002). Best practices in school consultation. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology-IV* (Vol. 1, pp. 625-643). Bethesda, MD: National Association of School Psychologists.

Zins, J. E., Kratochwill, T.R., & Elliot, S. N. (1993). Current status of the field. In J. E. Zins, T. R. Kratochwill, & S. N. Elliot (Eds.), *Handbook of consultation services for children: Applications in educational and clinical settings* (pp. 1 – 12). San Francisco, CA: Jossey-Bass Publishers.

Footnotes

[1] Use of the terms “consultant” and “consultee” are not representative of actual consultants and consultees in consultation, but used in order to exemplify the analogue nature of the study.

APPENDIX A

Demographic Survey

Gender (circle): M F

Year in College (circle): Freshman

Sophomore

Junior

Senior

Graduate: 1st Year 2nd Year 3rd Year +

What geographic area would you call your hometown? (circle):

South North Midwest West

APPENDIX B

Preexisting Social Skills Survey

	Never		Sometimes		Frequently
1. I share laughter with others.	1	2	3	4	5
2. I make friends easily with others.	1	2	3	4	5
3. I participate or talk with others for extended periods of time.	1	2	3	4	5
4. I have a sense of humor.	1	2	3	4	5
5. I initiate conversations with others in informal situations.	1	2	3	4	5
6. I cooperate with others in group activities or situations.	1	2	3	4	5
7. I interact with a variety of coworkers.	1	2	3	4	5
8. I compliment others regarding personal attributes.	1	2	3	4	5
9. I participate in social situations and activities skillfully.	1	2	3	4	5
10. I keep conversations with others going.	1	2	3	4	5
11. I am considerate of the feelings of others.	1	2	3	4	5
12. I invite others to interact and share activities.	1	2	3	4	5
13. I show sympathy for others.	1	2	3	4	5
14. I spend free time interacting with others.	1	2	3	4	5
15. I am sensitive to the needs of others.	1	2	3	4	5
16. Others seek me out to involve me in activities.	1	2	3	4	5
17. I generally follow directions given by others.	1	2	3	4	5
18. I am generally compliant.	1	2	3	4	5
19. I generally follow directions given by superiors.	1	2	3	4	5

APPENDIX C

Treatment Acceptability Questionnaire

Directions: Please answer these questions that deal with your reactions to the treatment proposed by the consultant. Circle the number that best describes your reactions.

1. Overall, how acceptable do you find the proposed treatment to be?

VERY UNACCEPTABLE 1 2 3 4 5 6 7 VERY ACCEPTABLE

2. How ethical do you think this treatment is?

UNETHICAL 1 2 3 4 5 6 7 FULLY ETHICAL

3. How effective do you think this treatment might be?

VERY INEFFECTIVE 1 2 3 4 5 6 7 VERY EFFECTIVE

4. How likely do you think it is that the treatment may have negative side effects?

VERY UNLIKELY 1 2 3 4 5 6 7 VERY LIKELY

5. How knowledgeable do you think the consultant is?

NOT KNOWLEDGABLE 1 2 3 4 5 6 7 VERY KNOWLEDGEABLE

6. How trustworthy do you think the psychologist is?

VERY UNTRUSTWORTHY 1 2 3 4 5 6 7 VERY TRUSTWORTHY

APPENDIX D

Perceived Consultant Effectiveness Survey

Directions: Think about the consultant you just met with, and complete the survey based on the following options below:

1 2 3 4 5 6 7

Strongly Disagree Neutral Strongly Agree

1. The consultant was empathic.	1	2	3	4	5	6	7
2. The consultant was encouraging.	1	2	3	4	5	6	7
3. The consultant expresses supportive affection.	1	2	3	4	5	6	7
4. The consultant showed respect.	1	2	3	4	5	6	7
5. The consultant was warm.	1	2	3	4	5	6	7
6. The consultant was interested and concerned.	1	2	3	4	5	6	7
7. The consultant was approachable.	1	2	3	4	5	6	7
8. The consultant was accepting and nonjudgmental.	1	2	3	4	5	6	7
9. The consultant was collaborative.	1	2	3	4	5	6	7
10. The consultant was pleasant.	1	2	3	4	5	6	7
11. The consultant was skilled in questioning.	1	2	3	4	5	6	7
12. The consultant was good at problem solving.	1	2	3	4	5	6	7
13. The consultant was observant and perceptive.	1	2	3	4	5	6	7
14. The consultant facilitated conversation/discussion.	1	2	3	4	5	6	7
15. The consultant was generally helpful.	1	2	3	4	5	6	7
16. The consultant offered useful information.	1	2	3	4	5	6	7
17. The consultant helped me to find alternative solutions to problems.	1	2	3	4	5	6	7

18. The consultant was a good listener.	1	2	3	4	5	6	7
19. The consultant encouraged me to consider a number of points of view	1	2	3	4	5	6	7
20. The consultant was able to offer assistance without completely "taking over" the management of problems.	1	2	3	4	5	6	7
21. I would request services from this consultant again, assuming that other consultants were available.	1	2	3	4	5	6	7

APPENDIX E

Follow Through Measure

Follow-Up Information

Suggested Solution:

Please do the following after leaving the study:

1. Send an e-mail to piratestudy@gmail.com with the answers to the following questions:

    Did you implement the treatment suggested by the consultant (yes or no)?

    If you DID implement the treatment suggested by the consultant:

        Why did you do so?

        Why do you think it worked?

    If you DID NOT implement the treatment suggested by the consultant:

        Why not?

        What do you think could have caused you to implement the treatment?

2. Drop off an index card (of any size) containing your name and e-mail address into the box on the door of Rawl 218 sometime between Monday, April 19th and Friday, April 23rd.

3. Complete the survey at https://survey.qualtrics.com/SE?SID=SV_4Mc4DhoJi5pQmJC.

APPENDIX F

Problem Solving Protocol

1. Assess the scope of consultee concerns.

Consultant Script:

"I'm here to talk to you about some common issues experienced by college students. I'm also here to provide some suggestions for overcoming any challenges you might have in any one of the areas I'm going to talk about. While we're talking I may have to take some notes."

Consultants now should go through each of the four common issues below and determine whether the consultee has experienced each one or not.

Homesickness	Y	N
Stress	Y	N
Relationship Issues	Y	N
Academic Difficulties	Y	N

After a brief discussion, choose one of the above areas of difficulty.

2. Define the problem in observable, behavioral terms.

To help in defining the problem, ask questions similar to the following:

A. Describe to me what it is like experience (issue).

B. What are some things you do when you are experiencing (issue)?

C. Could someone else recognize if you are experiencing (issue)? If so, how?

Create a problem definition:

3. Estimate common dimensions of the problem (frequency, intensity, and duration).

Frequency: How often do you experience (issue)?

Intensity: How intense would you say the (issue) is?

Duration: How long have you been experiencing (issue)?

4. Identify environmental contingencies surrounding the issue.

In what settings do you experience (issue)?

Do other people influence (issue) in a positive or negative way?

Are there certain times when you are more likely to experience (issue)?

Are there certain circumstances when you are most likely to experience (issue)?

What happens as a result of the (issue)?

How do other people respond to you after (issue)?

Are there certain things that happen after (issue)?

5. Make a summary statement (that defines the problem, the relevant dimension of the problem, and the contingencies associated with the problem).

Summary Statement:

Ask the consultee if the statement sounds like a valid representation of what they are currently experiencing, and make adjustments if necessary.

6. Identify *one* goal of change.

Choose *one* relevant dimension of the problem and/or a contingency and suggest making a change to one or both. Start brainstorming by asking the consultee what aspects of the problem would need to change for you to say that you are better/feeling better.

Example: Would you say that your (difficulty) would be better if (difficulty) was (less frequency, less intense, or shorter in duration)?

7. Suggest an intervention and plan for follow-up.

Clearly write out the simple suggestion for the consultee to take with them.

Instruct the consultee to follow the directions on the Follow-Up Information sheet.

APPENDIX G

Recruitment Script

The principal investigator will read the following recruitment script to graduate students in either in MA/CAS School Psychology program or PhD Pediatric School Psychology Program.

"I am recruiting participants for a study. The purpose of this research is to examine how consultants use skillful behaviors when working with others in a one-on-one interaction. The decision to take part in this research is yours to make. By doing this research, we hope to learn about skillful behaviors used by consultants. Participation will take approximately three hours over the course of one day. You will receive no direct personal benefits, but the information gained by the researcher through this study may help others in the future."

APPENDIX H

Institutional Review Board Approval Form

University and Medical Center Institutional Review Board
East Carolina University, 600 Moye Boulevard
1L-09 Brody Medical Sciences Bldg. • Greenville, NC 27834
Office **252-744-2914** • Fax **252-744-2284** • **www.ecu.edu/irb**
Chair and Director of Biomedical IRB: L. Wiley Nifong, MD
Chair and Director of Behavioral and Social Science IRB: Susan L. McCammon, PhD

TO: Lindsey Long, Student, Dept of Psychology, ECU—Rawl 104

FROM: UMCIRB

DATE: April 1, 2010

RE: Expedited Category Research Study

TITLE: "Be Nice or Pay the Price: The Effect of Interpersonal Skills Training on Ratings of Integrity, Acceptability, and Effectiveness"

UMCIRB #10-0112

This research study has undergone review and approval using expedited review on 4.1.10. This research study is eligible for review under an expedited category number 7. The Chairperson (or designee) deemed this **unfunded** study **no more than minimal risk** requiring a continuing review in **12 months**. Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The investigator must adhere to all reporting requirements for this study.

The above referenced research study has been given approval for the period of **4.1.10** to **3.31.11**. The approval includes the following items:

- Internal Processing Form (dated 3.16.10)
- Recruitment Script (received 4.1.10)
- Thesis Proposal, March 2010
- Problem Solving Protocol (received 3.23.10)
- Treatment Acceptability Questionnaire (received 3.23.10)
- Perceived Consultant Effectiveness Survey (received 3.23.10)
- Preexisting Social Skills Scale (received 3.23.10)
- Treatment Integrity Questionnaire (received 3.23.10)
- Informed Consent—Graduate Students (dated 3.23.10)
- Informed Consent—Student (dated 3.23.10)
- COI Disclosure Form

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

The UMCIRB applies 45 CFR 46, Subparts A-D, to all research reviewed by the UMCIRB regardless of the funding source. 21 CFR 50 and 21 CFR 56 are applied to all research studies under the Food and Drug Administration regulation. The UMCIRB follows applicable International Conference on Harmonisation Good Clinical Practice guidelines.